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August 2012



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MFC News

Caring for the Trees and Forests of Mississippi Since 1926

NEW WEBSITE OFFERS LANDOWNERS INTERACTIVE TOOLS FOR MANAGING WOODLANDS

By John Platt, Mother Nature Network, Earth Matters, Wilderness & Resources.

Here are some interesting numbers: of the 747 million acres of wooded land in the United States, more than 250 million acres are owned by private individuals and families. Across the country, 11 million families own forests and wooded areas that are vital to our clean air, clean water and wildlife. Of those 11 million families, 4.5 million each own 10 or more acres of woodland.

And yet, only 4 percent of those families and individuals have a management plan in place for their woodlands. According to the [American Forest Foundation](#) (AFF), the lack of management plans puts these treasured properties at ever-increasing risk of fires, invasive species, pathogens and other problems.

To help woodland owners better understand and protect their properties, the AFF has launched

a new website, [My-LandPlan.org](#), which can assist family forest owners in mapping, protecting and enjoying their woods for years to come.

The free website "helps you discover the possible threats to your land," says Tom Martin, president and CEO of AFF. "If you own a plot of land, it helps you ask the right questions based on your goals for your land and refers you to the right sources."

For example, if a family says they want to preserve the natural beauty of their land for hiking, a customized set of information is presented. If they want to use the land for hunting, birding, fishing, camping or tree harvesting, other resources are presented.

Once these goals are selected, the tool then suggests recommended action steps and offers relevant information to help property owners reach their goals. The site also connects owners to

local professionals and organizations that can offer guidance and assistance as needed.

Users can also opt to share some of their information with neighbors who might be dealing with, or have already successfully overcome, some of the same issues. "One of the most trusted advisors to landowners is their neighbors," Martin says. "We wanted to build a tool that would let neighbors talk to each other and share what they're doing and what challenges they are facing."

Martin says most family forest owners do not have a management plan in place because they say they just want to watch nature take its course. But he warns that in a time where trees are at risk from Dutch elm disease, Asian long-horned beetles and "a thousand other pests and pathogens," that might no longer be the best path. "If you're not clear about those

(Continued on page 4)

The Mississippi Forestry Commission provides equal employment opportunities and services to all individuals regardless of disability, race, age, religion, color, gender, national origin, or political affiliation.

This institution is an equal opportunity provider

NEW MFC COMMISSIONERS

Gov. Phil Bryant has appointed the following to the Mississippi Forestry Commission's Board of Commissioners:

- ♦ Jim Lockett of Tutwiler, MS. Mr. Lockett is representing the 2nd Congressional District.
- ♦ Lloyd Young of Eupora, MS. Mr. Young is representing the At Large District.

For a complete listing of our Board of Commissioners, visit this link on our website: www.mfc.ms.gov/boc.php

Newsletter Deadlines

All submissions are welcome. Photographs are encouraged (although space limitations August curtail inclusion). Items must be received by the **10th of the month** to be included in the next month's issue. E-mail submissions (in *Microsoft Word*) and photos to

lharris@mfc.state.ms.us

or mail to:

Lisa A. Harris

Mississippi Forestry Commission
822 SCR 115 S
Raleigh, MS 39153

NATURE WALKS GOOD FOR BODY, MIND AND SPIRIT

By Joanna Angle, Berkeley Independent, South Carolina.

People need trees. Literally. While we have intuitively known for years that taking a nature walk is good for our bodies, minds and spirits, researchers are now discovering that the human-tree connection can be critical to our health.

Scientists in Japan have learned that individuals walking in woods experience more positive physiological benefits than subjects who walked in the city. In one recent study, forest walkers showed lower concentrations of salivary cortisol, known as the stress hormone; lower blood pressure and heart rate; reduction of adrenaline and noradrenalin, also stress-related hor-

mones; and an increase in immunity-boosting natural killer cell activity, and the numbers of NK cells and anti-cancer proteins known to combat cancer.

Japanese researchers concluded that walking in dense woods at a leisurely pace at least once a month could even have the effect of helping prevent cancer generation and progression.

Quig Li, Ph.D., a lead professor for several studies, believes that in the future persons diagnosed with high blood pressure or hypertension may be given prescriptions for "forest therapy."

Currently Japan has more than 30 officially designated centers where patients engage in "shinrin-yoku," or forest bathing. They enjoy guided walks on woodland

trails and receive free medical examinations under the trees. Doctor Li emphasizes that shinrin-yoku is regarded as preventive, rather than corrective, medicine.

As increasing levels of stress, impaired mental health, chronic heart disease and obesity strain public health budgets, policy makers are looking more closely at prevention to curb costs. The relationship between human health and the natural environment, particularly forests, is gaining global attention

Joanna Angle is a 30-year resident of Chester County and a Master Tree Farmer. She has previously directed the Olde English District Tourism Commission, produced and hosted "Palmetto Places" for SCETV and helped establish the Chester campus of York Technical College.



Mississippi's First Tree Line USA Electric Cooperative.

4 County Electric was awarded the first every Mississippi Tree Line USA awards on June 14, 2012.

MID-SOUTH FORESTRY EQUIPMENT SHOW

Please make plans to be in Starkville October 5-6, 2012 at the MSU Starr Memorial Forest for "[The South's Premier Live Equipment Venue for 2012](#)"

You can pre-register online today, visit <https://hat-tonbrown.wufoo.com/forms/2012-midsouth-attendee-registration-form/> or [click here](#).



Promoting sustainable forestry and great working relationship between MFC and BOE as shown in this picture with Service Forester Lee Eaton and Calhoun County Superintendent of Education. Oh yeah also promoting the American Tree Farm program.

FALLEN FIREFIGHTER

All,
It is with great sadness that I inform you of the loss of one of our Fire Fighters yesterday on the Steep Corner Fire near Orofino ID. The victim, Anne Veseth, a seasonal employee of the Nez Perce – Clearwater National Forest was apparently killed by a falling tree. Anne was 20 years old and in her second season as a firefighter. Please join me in keeping the family, friends, and colleagues of Anne Veseth in your hearts.

Lenise Lago, US Forest Service
Deputy Chief, Business Operations

From CBSNews,
Tree kills US Forest Service firefighter in Idaho.

LEWISTON, Idaho — The U.S. Forest Service says a firefighter was killed when she was struck by a falling tree while working on a fire in northern Idaho.

The Nez Perce-Clearwater National Forest supervisor says the crew member was struck Sunday afternoon when one tree fell and crashed into another tree, causing it to fall in a domino effect.

The firefighter's name hasn't been released. She was working on the Steep Corner fire, which has burned about 43 acres near Orofino.

Augusts' Birthdays



William Cook -1
Louis Anderson -3
William Jefferson -4
James Palmer -4
James Edwards -5
Billy Dorsey -6
Kevin Saul -8
Douglas Buchanan -9
Ricky Hartness -9
Howard Ornsbey -9
Mary Sachs -9
Kenneth McNease -10
Larry Boone -12
Judy Deare -12
Thomas Gunn -13
Charles Belk -14
Lisa Harris -14
Randall Brooks -15
Johnny Hobson -15
Jeff Yelverton -16
Kenneth Berryman -17
Randy Catt -18
Stephen Mason -18
Paul Tadlock -18
Charles Compliment -20
Mandy Harrell -20
Grady Abel -21
James Parker -21
Kenneth Cline -22
Ronald Stafford -22
Nathan Thornton -22
Aubrey Anderson -23
Orlando Ellerby -23
Dennis Dauterive -24
Collin Kent Strickland -24
Johnny Keys -24
Martin Little -25
Dustin Barnett -26
Charles Eidson -27
Scott Miles -27
Wilfred Wesley -27
Daniel Crump -2
Marcus Gilbert -30
Travis Widener -30
Coley Bryant -31
Wesley Crum -31





- ☺ Andrea L. Kirkwood, Emergency Telecommunicator, Grenada County, Northwest District
- ☺ Jacob Hamilton, Forestry Technician I, Capital District – Yazoo County
- ☺ Lakino Woodson, Forest Ranger II, Northwest District – Tallahatchie County
- ☺ Jeremy Green, Forest Ranger I, Northeast District – Lee County
- ☺ Larry Nunley, Forest Ranger I, Northeast District – Tishomingo County
- ☺ Wade Ladner, Forest Ranger I, Harrison County, Southeast District
- ☺ Kevin Craft, Forest Ranger I, Forrest County, Southeast District
- ☺ Justin Skipper, Forest Ranger I, Hancock County, Southeast District
- ☺ Joshua Thompson, Forestry Technician I, Stone County, Southeast District
- ☺ Coley D. Bryant, Emergency Telecommunicator I, Northeast District.

NEW WEBSITE OFFERS LANDOWNERS INTERACTIVE TOOLS FOR MANAGING WOODLANDS (CONTINUED)

(Continued from page 1)

things that you love about your land and think strategically about how to keep them sustainably, you can lose them," he warns.

A management plan doesn't have to be a major effort, Martin says.

"The site allows you to set up an intentional

monitoring program and tells you how to strategically walk your land." MyLandPlan offers tools to let landowners track the presence of diseases, destructive insects and other factors and see if things are getting better or worse over time.

The new site fits into the broader mission of

the forest foundation, which also performs on-the-ground conservation work, education and other [sustainable forestry](#) initiatives. "Our job is to give woodland owners better tools to take better care of their land," Martin says.

2012 MFA ANNUAL MEETING

"Capture The Moment"

Make plans now to attend the 2012 MFA Annual Meeting set for Oct. 17-19 at the BancorpSouth Arena in Tupelo, Mississippi. Meeting registration will be mailed later this month.

MFA 2012 Annual Meeting Speakers include: Wildlife Photographer Stephen Kirkpatrick, MSU Journalist in Residence Sid Salter and MSU Faculty Dr. Ian Munn and Dr. James Henderson. Drs. Munn and Henderson will hold a special workshop on Wednesday, October 17, 2012.

2013 BACKYARD & BEYOND CONFERENCE

It's official! NFPA's 5th Backyards & Beyond Wildland Fire Educational Conference heads to Salt Lake City, Utah, November 12 – 16, 2013.

The event is a great opportunity to explore key issues with dozens of breakout sessions and five educational tracks. A

preconference workshop, "Assessing Wildfire Hazards in the Home Ignition Zone," will be held November 12 – 13.

This comprehensive conference always brings together a diverse audience of leading wildland fire experts, Firewise community representa-

tives, community planners, civic leaders, homeowners and residents, insurance professionals, landscape architects and others, to network and share best-practices everyone can take back to their communities and workplaces.



NFPA News

2014 CALENDAR FIREWISE DAY PHOTO CONTEST

The National Fire Protection Association's (NFPA) Firewise® Communities Program announces its 2014 Calendar Firewise Day Photo Contest and invites photo enthusiasts to submit their favorite, original photographs of their community's Firewise Day events or activities. Winning entries will be displayed in the 2014 Firewise calendar.

Whether it's a "chipper day" to clear brush and tree limbs, a state fair exhibit, a neighborhood clean-up day, or door-to-door outreach, your hard work helps contribute to a community that is safer

from wildfire. Remember, each photo should highlight residents *actively* participating in Firewise Day activities. So, gather your neighbors and be creative!

if you're an official Firewise community looking to renew or a neighborhood starting the process for the first time, we want to hear from you. Show us your accomplishments! A total of 15 photos will be selected representing each month, beginning with December 2013 and including the back and front covers.

The contest runs from

July 2, 2012 through November 2, 2012. The winners will be announced February 8, 2013.

More information about the contest, including rules and how to enter can be found on the Firewise website. Additional resources and tips on how to plan a Firewise Day event are also available. To learn how others have creatively hosted a Firewise event, visit the success stories page on the website.

We look forward to hearing from you. Good luck!

HUNGRY PEST WEBSITE

Wesley Nettleton, Director, Forest Health Protection, USDA Forest Service.

The USDA APHIS has launched the "Hungry Pests" website to educate people about the danger of invasive species throughout the US.

They describe hungry pests as invasive species that threaten to harm crops and trees. If left unchecked, they can devastate entire agricultural industries

and forests, eliminating jobs, threatening our food supplies and costing billions.

The website gives users the ability to report pests and tips on what the public can do to eliminate the spread of invasive species.

Hungry Pest Website address: <http://www.hungrypests.com/>



Moving On

- * Joshua Reid, Forest Ranger, Southeast District
- * Christine McQueen, Emergency Telecommunicator, Stone County, Southeast District
- * Anthony Williamson, Forest Ranger, Webster County, East Central District
- * James Morton, Forest Ranger, Lowndes County, East Central District
- * John Taylor Dean, Forestry Technician, East Central District
- * Stephen Ladner, Forest Ranger, Pearl River County, Southeast District
- * Nathan Thornton, Forestry Technician, Statewide
- * Mark Walters, Forest Ranger, Jones County, South Central District
- * Colton Redmond, Forest Ranger, Stone County, Southeast District
- * Dustin Miles, Forest Ranger, Winston County, East Central District
- * Mallore A. Swartz, Forestry Technician, Attala County, East Central District
- * Jamie Marroy, Forest Ranger, Harrison County, Southeast District



Please keep these fellow co-workers and their families in your prayers as they deal with their loses.

- ♦ Alcorn/Tippah Service Forester Glenn Mynatt's father passed away on in July 2012.
- ♦ Newton County Ranger Terry Smith's father died the end of June 2012.
- ♦ Forest Ranger Jonathan Freeman's grandmother was killed in a car accident in early June.
- ♦ Smith County Forester Coburn Yelverton and Jones County Ranger Jeff Yelverton lost their mother, by death in July.
- ♦ It is with profound sadness that I announce the passing of Jeff Crowder. Jeff was a Service Forester with the Mississippi Forestry Commission for over 15 years. Jeff leaves behind two children, his parents, a grieving community and host of friends.

MEACHAM HARLOW ... SOUTHERN OUTREACH OFFICER

Effective July 2012, Meacham Harlow assumed the position of Southern Outreach Officer for the Mississippi Forestry Commission. Harlow will be the main point of contact for all outreach and public information/education in the southern region of Mississippi. This region includes the Southeast Dis-

trict and Southwest District of the Mississippi Forestry Commission.

Harlow, a graduate of Jones County Junior College with an associate degree in forestry, has experience in education and a background in sales. She was awarded the Mississippi Department of Wildlife, Fisher-

ies and Parks Foundation Scholarship, the Eastman Gardiner Scholarship and the Jim Walley Forestry Scholarship. She was also a member of the Jones County Junior College Senate.

She is also certified as a Project Learning Tree officiator.

Personnel Personals (Cont.)



Moving On

- * Jacob Nettles, Forestry Technician, Jefferson County, Southwest District
- * Jessie Goff, Forest Ranger, Jackson County, Southeast District
- * Terry Johnson, Forest Ranger, Marshall County, Northeast District
- * Tynpel Blansett, Forester, State Office, Hinds County
- * Andy Duvall, Forest Ranger, Holmes County, Northwest District



Stork Report

East Central District, Assistance District Forester, Keith Beatty and his wife Ashlea, have a baby boy

Jackson Emmett Beatty
May 19, 2012

Congratulation !!!





Happy Retirement!

The following employees retired from the MFC this fiscal year.

- ☉ **Dianne Williams**, Admin Assistant, Monroe County, Northeast District.
- ☉ **Thomas Howard**, Forest Ranger, Franklin County, Southwest District.
- ☉ **Jim Bush**, Service Forester, Covington County, South Central District, 26 years of service.
- ☉ **James Jones**, Forest Ranger, Clarke County, South Central District, 6 years of service.
- ☉ **Alan Keith Robinson**, Forestry Technician, South Central District, 27 years of service.
- ☉ **Brant Godbold**, District Forester, Northwest District, 33.8 years of service.
- ☉ **Steve Burgess**, Assistant District Forester, Northwest District, 35 years of service.
- ☉ **Rex Arnold Mason**, 26 years of service.
- ☉ **Wayne Tucker**, Assistant State Forester, 8.5 years of service
- ☉ **Albert G. Toney**, Equipment Mechanic Master, Ranking County, Capital District, 34 years of service.
- ☉ **Tom Robertson**, Forest Rangers, Humphreys County, Northwest District, 21.5 years of service.
- ☉ **Paul David Thornton**, Forest Ranger, Smith County, South Central District, 15 years of service.
- ☉ **Kenna Hernandez**, Administrative Assistant, Northwest District Office, 28 years of service.
- ☉ **Billy Melton**, Emergency Telecommunicator, Supervisor, Northwest District Office, 39.75 years of service.
- ☉ **Tommy L. Scott**, 37.7 years of service.
- ☉ **Joe Barnes**, Forest Ranger, Walthall County, Southwest District, 21.25 years of service.
- ☉ **Robert McGivney**, 28 years of service.
- ☉ **David McVay**, Emergency Telecommunicator, Supervisor, Lee County, Northeast District
- ☉ **Bruce Frasier**, District Forester, Neshoba County, East Central District.
- ☉ **Randall Varnado**, Forest Ranger, Jackson County, Southeast District.
- ☉ **Kenneth Mobley**, Forest Ranger, Tishomingo County, Northeast District.
- ☉ **John Rhodes**, Forester, Panola County, Northwest District.
- ☉ **James Parker**, Emergency Telecommunicator, Jasper County, South Central District.
- ☉ **Tommie L. Scott**, Forest Ranger, Northwest District, 37.7 years of service.
- ☉ **Jackie McKee**, Neshoba County, East Central District, 30.7 years of service.
- ☉ **Dorthey Compton**, Administrative Assistant, Lee County, Northeast District.
- ☉ **Randal Rometry**, Forester, State Office.

Time is a wonderful thing
To have on your side at
last.
Look forward with faith to
the future,
Accept with peace the
past.

Time for travel, fun and
adventure.
To discover new dimen-
sions in yourself.
It is time to do what
pleases you.
Take a dusty dream off
the shelf.

Fulfillment is found in ex-
pression.
Priorities are yours to ar-
range.
Retirement is just another
word.
For what can be a wonder-
ful change.
(Bee Ewing)



- ☉ **Randy Merritt**, Forest Ranger, George County, Southeast District.

SOUTH PINE BEETLE IN MISSISSIPPI

By John J. Riggins, Forest Entomologist

For the first time in quite a few years, it seems that SPB populations in at least one portion of Mississippi are on the rise. During late May and throughout June, foresters on the Homochitto National Forest in Southwest Mississippi have been reporting a growing number of active SPB spots. During an initial survey flight during early June, more than 80 spots were detected. Most of these spots were on Forest Service land, but a few were on private lands. The Mississippi Forestry Commission is working closely with the U.S.D.A. Forest Service to identify and notify landowners affected by this apparent SPB outbreak. A more recent detection flight that was just completed indicated at least 175 new SPB spots in and around the Homochitto.

This appears to be shaping up to be a major outbreak incident. I recently visited some of the spots on the Homochitto, and they were very active and some are rapidly expanding. State and Fed-

eral foresters are working hard to treat spots with salvage cuts or cut and leave operations.

Landowners in Franklin, Amite, Wilkinson, Adams, Jefferson, Lincoln, and Copiah Counties are urged to be diligent and conduct inspections of their lands to determine if SPB activity is present. This publication (<http://naldc.nal.usda.gov/download/CAT87208970/PDF>) provides a good overview of SPB signs and symptoms. If any SPB activity is suspected, please contact your local MFC office. Timely salvage or cut and leave operations can dramatically limit total timber losses incurred due to a SPB outbreak, and can limit a landowners liability should the infestation spread to adjacent properties.

Landowners in the rest of the state are also encouraged to pay close attention for SPB activity. No other major outbreaks are known of or anticipated for the rest of the State at this time, but forest stakeholders throughout Mississippi should keep a close eye on things as this year progresses.



**Update as of
08/01/2012.**

The southern pine beetle (*Dendroctonus frontalis*) continues to have increased impacts on Mississippi forests during the summer of 2012.

During late May and throughout June, foresters on the Homochitto National Forest in Southwest Mississippi began reporting a growing number of active SPB spots. During an initial survey flight during early June, more than 80 spots were detected. Most of these spots were on Forest Service land, but a few were on private lands. The Mississippi Forestry Commission is working closely with the U.S.D.A. Forest Service to identify and notify landowners affected by this apparent SPB outbreak. Another



UPCOMING URBAN EVENTS

Creating A Legacy of Lasting Value - September 13, 2012. Anyone interested in wanting to learn about trees and green spaces; elected officials; neighborhood associations; homeowners; developers; foresters; arborists; nurserymen; realtors and others. **To Register:** Contact Donna Yowell at dyowell@aol.com or call 601-672-0755. You may also contact Andy Parker at aparker@hattiesburgms.com, 601-596-6649 or Corey Proctor at cproctor@co.forrest.ms.us / 601- 584-6162

detection flight during late June/early July indicated at least 175 new SPB spots in and around the Homochitto at that time. Most recently, an aerial detection flight reported over 200 more SPB spots, bringing the total number of infestations in and around the Homochitto to over 500.

I recently visited some of the spots on the Homochitto, and some were still very active and rapidly expanding, despite being mid-summer and very hot, which typically slows SPB spot expansion. State and Federal foresters are working hard to treat spots with salvage cuts or cut and leave operations (Fig. 2, see page 2), however USDA Forest Service suppression funds are low and could eventually lead to slowed or halted suppression activities if more funds are not allocated.

Landowners in Franklin, Amite, Wilkinson, Adams, Jefferson, Lincoln, and Copiah Counties are urged to be diligent and conduct inspections of their lands to determine if SPB activity is present. This [publication](http://naldc.nal.usda.gov/download/CAT87208970/PDF) (<http://naldc.nal.usda.gov/download/CAT87208970/PDF>) provides a good overview of SPB signs and symptoms. If any SPB activity is suspected, please contact your local

MFC office. Timely salvage or cut and leave operations can dramatically limit total timber losses incurred due to a SPB outbreak, and can limit a landowners liability should the infestation spread to adjacent properties.

Landowners in the rest of the state are also encouraged to pay close attention for SPB activity. No other major outbreaks are known of or anticipated for the rest of the State at this time, but forest stakeholders throughout Mississippi should keep a close eye on things as this year progresses.



SPB attack densities are very high in some spots, as evidenced by pitch tubes on this tree in Homochitto National Forest on 7/31/2012. Photo Credit, John Riggins



Cut and leave operation on Homochitto National Forest in August 2012.

Safety First . . .

WEST NILE VIRUS AND MOSQUITO-BORNE ILLNESSES



Mosquito-borne illnesses include West Nile virus, St. Louis encephalitis, and Eastern Equine encephalitis. These illnesses affect birds, animals and humans, causing flu-like symptoms in people who are bitten by infected mosquitoes. Occasionally, illness can be severe, leading to meningitis or encephalitis.

Types of Mosquito-Borne Diseases:

Five main types of viral disease in Mississippi are carried by mosquitoes. Only certain types of mosquitoes carry viruses of concern to people. A mosquito must first become infected by feeding on a bird that has the virus, then bite a human or animal to pass the disease along. There are five main types of viral illness carried by mosquitoes in the United States.

- ◆ West Nile virus: WNV has been reported in Mississippi in horses, birds, mosquitoes and humans. In humans, WNV infection can lead to dangerous conditions such as meningitis or encephalitis. Anyone can get WNV, but peo-

ple over 50 years of age are more severely affected. Approximately 3 percent to 15 percent of people with WNV die. Unlike other mosquito-borne illnesses, certain species of birds (especially crows and blue jays) can also get sick and die from the disease, as can horses.

- ◆ St. Louis encephalitis: SLE causes illness only in humans. Historically, it has been the most common disease carried by mosquitoes in Mississippi. SLE primarily affects the elderly, occurring in summer and early fall. SLE rarely causes death, although approximately 15 percent of the patients with severe symptoms die.

- ◆ LaCrosse encephalitis: LAC can cause illness in humans, though it is more common in the midwestern U.S. rather than Mississippi. Cases occur from spring to fall, usually affecting children under 16 years of age. Only about one percent of people who become ill with LAC die.

- ◆ Eastern Equine encephalitis: EEE causes illness in humans, horses and some birds. Very few human cases of EEE have ever occurred in Mississippi. Most infections occur in horses, from spring to fall. People of all ages can get the disease, but children are more likely to have severe illness or die. Approximately 30 to 60 percent of those who become ill with EEE die.

Prevention

Mosquito-borne illnesses can be prevented by eliminating places where mosquitoes breed, and by protecting yourself from mosquito bites when outside. On these pages you'll find recommendations for protection, and other steps you can take to help prevent the spread of these diseases.

Steps to take to avoid mosquito-borne diseases

Protecting Yourself

- ◆ Avoid places and times when mosquitoes bite. Evenings and mornings have the most mosqui-

to activity.

- ◆ Wear shoes, socks, long pants, and a long-sleeved shirt when outdoors for long periods of time, or when mosquitoes are most active. Clothing should be light colored and made of tightly woven materials to keep mosquitoes away from the skin. Pants legs should be tucked into shoes or socks, and collars should be buttoned.
- ◆ Individuals should wear gloves when handling any dead bird or mammal because of the possibility of other diseases.
- ◆ Use mosquito netting when sleeping outdoors or in an un-screened structure.
- ◆ Use an insect repellent such as DEET (N,N-diethyl-m-toluamide), or other recommended ingredients. Products with up to 30 percent DEET will provide adequate protection under most conditions. Use DEET concentrations of 10 percent or less on children ages two years to 12 years of age, as recommended by the

First Time, Every Time

American Academy of Pediatrics. For children less than two years of age, parents should consult their pediatrician. *Always follow the manufacturer's directions for use as printed on the product label.*

Protecting Your Home

You can protect your family from biting mosquitoes by reducing the amount of standing water available for mosquito breeding in or near your property:

- ◆ Repair failed septic systems.
- ◆ Keep grass cut short and shrubbery trimmed. Remove all leaf debris
- ◆ Dispose of old tires, cans, plastic containers, ceramic pots, or other unused containers that can hold water.
- ◆ Change the water at least once per week in bird baths, wading pools and other water containers on your property.
- ◆ Cover trash containers to keep out rainwater. Be sure water does not collect in the bottom of garbage cans.
- ◆ Clean clogged roof gutters, particularly if leaves tend to plug up the drains. Make sure roof gutters drain properly, and clean clogged gutters in the spring and fall.
- ◆ Repair leaky water pipes and outside faucets.
- ◆ Aerate ornamental pools or stock them with predatory fish.
- ◆ Clean and chlorinate swimming pools even if they are not being used. Clean and chlorinate outdoor saunas and hot tubs. Drain water from pool covers.
- ◆ Keep drains, ditches, and culverts free of grass clippings, weeds, and trash so water will drain

properly.

- ◆ Dispose of tin cans, plastic containers, ceramic pots or similar water-holding containers.
- ◆ Drill holes in the bottoms of all recycling containers that are kept outdoors.
- ◆ Turn over plastic wading pools and wheelbarrows when not in use.
- ◆ Clean vegetation and debris from the edge of ponds.
- ◆ Use landscaping to eliminate standing water that collects on your property.
- ◆ Repair damaged or torn window and door screens.
- ◆ Remove outdoor pet food and water dishes that are not being used.
- ◆ Flush livestock water troughs twice a week.
- ◆ Check around construction sites or do-it-yourself improvements to ensure that proper backfilling and grading prevent drainage problems.

And Protect Your Community

- ◆ Call your local health department to report dead birds. Find county and **Health Info** numbers under Health Department in the Bell-South White Pages.
- ◆ To submit blue jays, crows, cardinals, house sparrows, and birds of prey (i.e., hawks, owls, etc.) avoid direct contact with and double-bag the bird. Keep the bird cool (under refrigeration) until you take it to the local health department. Do not submit decayed birds.
- ◆ If you know of specific mosquito control problems, call your local city or county public works director, the City Hall, or the Board of Supervisors.

- ◆ Learn what your local government is doing to control mosquitoes. Ask how you can help.
- ◆ Remind or help neighbors to eliminate mosquito breeding sites on their property.

Insect Repellents

Products containing one of the following two active ingredients typically provide longer-lasting protection than any others registered with the EPA:

DEET

- ◆ DEET is an effective insect repellent used worldwide for over 40 years. DEET products come in lotions, creams, gels, sprays, and towelettes. Products containing DEET must be used properly. Be sure to:
 - ◆ **Read and follow instructions** on the label to avoid excessive use and over-application. In most circumstances products with 25 percent to 35 percent DEET provide adequate protection for adults.
 - ◆ **Lower concentrations** are used on children. Do not allow children to apply DEET repellent themselves, and do not use DEET on infants.
 - ◆ **Apply DEET** repellent to clothes whenever possible. Apply sparingly to exposed skin, and only then if the label permits.
 - ◆ **Use just enough repellent** to cover exposed skin and/or clothing.
 - ◆ **Do not spray DEET** directly on the face. Rather, spray repellent onto the hands and use them to apply it to the face, avoiding sensitive areas like the eyes, mouth, and nasal membranes.

WEST NILE VIRUS AND MOSQUITO-BORNE ILLNESSES (CONTINUED)

- ◆ **Do not apply over cuts,** wounds, irritated skin, or under clothing.
- ◆ **To find out** if you have a reaction to DEET, apply the repellent to a small area of an arm or leg before general use.
- ◆ **To prevent damage,** avoid spraying repellents on plastic (such as watch crystals and eyeglasses), synthetic fabrics, leather, or painted or varnished surfaces.
- ◆ **Do not spray DEET** repellents in enclosed areas.
- ◆ **Upon returning indoors,** wash any treated skin with soap and water.
- ◆ **Wash any DEET** treated clothing before wearing them again.
- ◆ DEET products usually repel mosquitoes for several hours. However, repellents are effective only at short distances from the treated surface. You may still see mosquitoes nearby. As long as you are not being bitten, there is no need to apply more repellent.

Products with these active ingredients may also be effective:

Oil of lemon eucalyptus

(p-menthane 3,8-diol, or PMD)

- ◆ Oil of lemon eucalyptus, or PMD, a plant based repellent was tested against mosquitoes found in the US, and provided protection similar to repellents with low concentrations of DEET.

- ◆ Oil of lemon eucalyptus has not been tested against mosquitoes that spread malaria and some other diseases which occur internationally. See the CDC Travelers' Health website for specific recommendations concerning protection from insects when traveling outside the United States.

Permethrin (for clothing)

- ◆ Products which contain permethrin are recommended for use on clothing, shoes, bed nets, and camping gear, and are registered with EPA for this use. Permethrin is not for use on the skin. Permethrin is highly effective as an insecticide and as a repellent. Permethrin-treated clothing repels and kills ticks, mosquitoes, and other insects, and retains this effect after repeated laundering. The permethrin insecticide should be reapplied following the label instructions. Some commercial products are available pretreated with permethrin.



2012 Mosquito Borne Illnesses in Human and Animals. Updated August 13, 2012

West Nile Virus and Mississippi

- ◆ Total West Nile Virus for the state of Mississippi = 59 Human Cases and one death.
- ◆ The new reported cases are in Copiah (2), Franklin, Hancock, Hinds (4), Jones (2), Lauderdale, Leflore, Lincoln (2), Madison (3), Monroe, Rankin (6), Sunflower, and Washington counties.
- ◆ Other Mosquito-Borne Illnesses = 0 Human; 25 Horses.